

IN THE CLAIMS

Please cancel claims 4, 7, 11, 13-14, and 17-23 without prejudice or disclaimer.

Please add the following new claims 24-27.

This listing of the claims replaces all prior versions of the claims in the application.

1. (Currently amended) An isolated polypeptide ~~comprising~~ selected from the group consisting of:

a) a ~~[[n]]~~ polypeptide comprising the amino acid sequence ~~selected from the group consisting of~~ SEQ ID NO:19, SEQ ID NO:1, SEQ ID NO:3-5, SEQ ID NO:7-14, SEQ ID NO:16-31, SEQ ID NO:33-34, SEQ ID NO:36-40, SEQ ID NO:42-48, SEQ ID NO:50-55.

b) a polypeptide comprising a naturally occurring amino acid sequence having at least 90% sequence identity to ~~[[an]]~~ the amino acid sequence ~~selected from the group consisting of~~ SEQ ID NO:19, SEQ ID NO:1, SEQ ID NO:3-5, SEQ ID NO:7-14, SEQ ID NO:16-31, SEQ ID NO:33-34, SEQ ID NO:36-40, SEQ ID NO:42-48, SEQ ID NO:50-55,

c) a biologically active fragment of a polypeptide comprising ~~[[an]]~~ the amino acid sequence ~~selected from the group consisting of~~ SEQ ID NO:19, and SEQ ID NO:1, SEQ ID NO:3-5, SEQ ID NO:7-14, SEQ ID NO:16-31, SEQ ID NO:33-34, SEQ ID NO:36-40, SEQ ID NO:42-48, SEQ ID NO:50-55, or

d) an immunogenic fragment of ~~[[an]]~~ the amino acid sequence ~~selected from the group consisting of~~ SEQ ID NO:19, SEQ ID NO:1, SEQ ID NO:3-5, SEQ ID NO:7-14, SEQ ID NO:16-31, SEQ ID NO:33-34, SEQ ID NO:36-40, SEQ ID NO:42-48, SEQ ID NO:50-55.

2. (Currently amended) An isolated polypeptide of claim 1, having ~~[[an]]~~ the amino acid sequence ~~selected from the group consisting of~~ SEQ ID NO:19, SEQ ID NO:1, SEQ ID NO:3-5, SEQ ID NO:7-14, SEQ ID NO:16-31, SEQ ID NO:33-34, SEQ ID NO:36-40, SEQ ID NO:42-48, SEQ ID NO:50-55.

3. (Original) An isolated polynucleotide encoding a polypeptide of claim 1.

4. (Canceled).
5. (Original) A recombinant polynucleotide comprising a promoter sequence operably linked to a polynucleotide of claim 3.
6. (Original) A cell transformed with a recombinant polynucleotide of claim 5.
7. (Canceled).
8. (Original) A method for producing a polypeptide of claim 1, the method comprising:
 - a) culturing a cell under conditions suitable for expression of the polypeptide, wherein said cell is transformed with a recombinant polynucleotide, and said recombinant polynucleotide comprises a promoter sequence operably linked to a polynucleotide encoding the polypeptide of claim 1, and
 - b) recovering the polypeptide so expressed.
9. (Original) An isolated antibody which specifically binds to a polypeptide of claim 1.
10. (Currently amended) An isolated polynucleotide ~~comprising~~ selected from the group consisting of:
 - a) a polynucleotide comprising the polynucleotide sequence ~~selected from the group consisting of SEQ ID NO:56-110~~ SEQ ID NO:74,
 - b) a polynucleotide comprising a naturally occurring polynucleotide sequence having at least 90% sequence identity to ~~[[a]] the~~ polynucleotide sequence ~~selected from the group consisting of SEQ ID NO:56-110~~ SEQ ID NO:74,
 - c) a polynucleotide ~~sequence~~ complementary to a), or
 - d) a polynucleotide ~~sequence~~ complementary to b)~~[[.]]~~ , and
 - e) an RNA equivalent of a)-d).

11. (Canceled).

12. (Original) A method for detecting a target polynucleotide in a sample, said target polynucleotide having a sequence of a polynucleotide of claim 10, the method comprising:

a) hybridizing the sample with a probe comprising at least 16 contiguous nucleotides comprising a sequence complementary to said target polynucleotide in the sample, and which probe specifically hybridizes to said target polynucleotide, under conditions whereby a hybridization complex is formed between said probe and said target polynucleotide, and

b) detecting the presence or absence of said hybridization complex, and, optionally, if present, the amount thereof.

13.-14. (Canceled).

15. (Original) A pharmaceutical composition comprising an effective amount of a polypeptide of claim 1 and a pharmaceutically acceptable excipient.

16. (Original) A method of treating a disease or condition associated with decreased expression of functional NuABP, comprising administering to a patient in need of such treatment the pharmaceutical composition of claim 15.

17.-23. (Canceled).

24. (New) A microarray wherein at least one element of the microarray is a polynucleotide of claim 3.

25. (New) A method of generating an expression profile of a sample which contains polynucleotides, the method comprising:

- a) labeling the polynucleotides of the sample,
- b) contacting the elements of the microarray of claim 24 with the labeled polynucleotides of the sample under conditions suitable for the formation of a hybridization complex, and
- c) quantifying the expression of the polynucleotides in the sample.

26. (New) An isolated polynucleotide consisting of at least 60 contiguous nucleotides of a polynucleotide of claim 10.

27. (New) A method of screening a compound for effectiveness in altering expression of a target polynucleotide, wherein said target polynucleotide comprises a sequence of claim 3, the method comprising:

- a) exposing a sample comprising the target polynucleotide to a compound, under conditions suitable for the expression of the target polynucleotide,
- b) detecting altered expression of the target polynucleotide, and
- c) comparing the expression of the target polynucleotide in the presence of varying amounts of the compound and in the absence of the compound.